

Amendments to the Claims:

Following is a complete listing of the claims pending in the application, as amended:

1. (Currently amended) A method of detecting a silent frame at a mobile station in a GSM transmission comprising:

- (a) receiving a data burst intended for said mobile station, said data burst including 116 encrypted bits, 26 training sequence bits, and 6 tail bits;
- (b) determining a signal-to-interference-and-noise ratio (SINR) for said data burst using at least said 116 encrypted bits and 26 training sequence bits; and
- (c) if said SINR is below a predetermined threshold, then identifying said data burst as from a silent frame.

2. (Original) The method of Claim 1, further including low pass filtering said SINR prior to comparing to said predetermined threshold.

3. (Original) The method of Claim 2, wherein said low pass filter has a β of approximately 0.95.

4. (Original) The method of Claim 1, wherein said predetermined threshold is less than 0.2.

5. (Currently amended) An apparatus for detecting a silent frame at a mobile station in a GSM transmission comprising:

- (a) means for receiving a data burst intended for said mobile station, said data burst including 116 encrypted bits, 26 training sequence bits, and 6 tail bits;
- (b) means for determining a signal-to-interference-and-noise ratio (SINR) for said data burst using at least said 116 encrypted bits and 26 training sequence bits; and

- (c) means for determining if said SINR is below a predetermined threshold and then identifying said data burst as from a silent frame.

6. (Original) The apparatus of Claim 5, further including a low pass filter that filters said SINR prior to comparing to said predetermined threshold.

7. (Original) The apparatus of Claim 6 wherein said low pass filter has a β of approximately 0.95.

8. (Original) The apparatus of Claim 5 wherein said predetermined threshold is less than 0.2.

9. (Currently amended) A method of detecting a silent frame at a mobile station in a GSM transmission comprising:

- (a) receiving a data burst intended for said mobile station;
- (b) determining a signal-to-interference-and-noise ratio (SINR) for said data burst as:

$$SINR = \frac{SLa}{NL a} = \frac{\frac{1}{148} \sum_{k=1}^{148} |r(k)|^2}{\frac{1}{148} \sum_{k=1}^{148} |n(k)|^2}$$

$$SINR = \frac{SLa}{NL a} = \frac{\frac{1}{148} \sum_{k=1}^{148} |y(k)|^2}{\frac{1}{148} \sum_{k=1}^{148} |n(k)|^2}$$

; and

- (c) outputting a silent frame indication signal (SI) determined by

$$SI = \begin{cases} 1, & \text{if } SINR < T \\ 0, & \text{if } SINR \geq T \end{cases}$$

where if SI is 1, then identifying said data burst as from a silent frame.

10. (Original) The method of Claim 9, wherein if SI is 0, then identifying said data burst as a useful frame.